ISSUED

# WP 05-WH1406

Revision 18

# Conveyance Loading Car

Technical Procedure

EFFECTIVE DATE: 04/03/19

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APPROVED FOR USE

**THIS DOCUMENT IMPLEMENTS HWFP REQUIREMENTS.**

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## CHANGE HISTORY SUMMARY

| REVISION NUMBER | DATE ISSUED | DESCRIPTION OF CHANGES |
|---|---|---|
| 18 | 04/03/19 | • Updated JHA.<br>• Added HWFP banner on cover page.<br>• Added Abbreviations and Acronyms.<br>• Added Attachment 2, Leak Categorization. |

## 1.0 INTRODUCTION

### 1.1 PURPOSE

This procedure provides instructions for preoperational inspection of the Conveyance Loading Car, 41-H-018.

Performance of this procedure, or selected sections of the procedure, implements inspection requirements of the HWFP relative to the scope of, and as defined in, this document. Unless otherwise noted, this procedure is performed by Waste Handling personnel.

### 1.2 SCOPE

This procedure specifies HWFP preoperational Conveyance Loading Car inspection requirements.

### 1.3 RECORDS

Records generated are handled in accordance with departmental RIDS. Performance of this procedure generates the Equipment Logbook.

## 2.0 REFERENCES

| DOCUMENT NUMBER AND TITLE | BASELINE DOCUMENT | REFERENCED DOCUMENT | KEY STEP |
|---|---|---|---|
| Title 40 CFR§264.15, General Inspection Requirements | ✓ | | |
| Hazardous Waste Facility Permit, EPA Identification Number NM4890139088-TSDF | | ✓ | **$** |
| DOE/WIPP-07-3372, Waste Isolation Pilot Plant Documented Safety Analysis | ✓ | | |
| DOE/WIPP-07-3373, Waste Isolation Pilot Plant Technical Safety Requirements | ✓ | | |
| WP 05-WH1101, Surface Transuranic Mixed Waste Handling Area Inspections | | ✓ | |
| WP 10-WC3011, Work Control Process | ✓ | | |
| WP 04-AD3016, Equipment Out of Service Process | | ✓ | |
| WP 15-GM1002, Issues Management Processing of WIPP Forms | | ✓ | |
| 05-WH1406-JHA, Conveyance Loading Car | ✓ | | |
| Equipment No. 41-H-018, Maintenance Manual for Conveyance Loading Car, West Mont Industries | ✓ | | |

2.1 ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| AR | Action Request |
| CFR | Code of Federal Regulations |
| CH | Contact-Handled |
| CMRO | Central Monitoring Room Operator |
| HWFP | Hazardous Waste Facility Permit |
| LCO | Limiting Conditions of Operation |
| OOS | Out of Service |
| PPE | Personal Protective Equipment |
| RIDS | Records Inventory and Disposition Schedule |
| RWP | Radiological Work Permit |
| SAT | Satisfactory |
| SEC | Site Environmental Compliance |
| WHE | Waste Handling Engineer |
| WIPP | Waste Isolation Pilot Plant |

## 3.0 PRECAUTIONS AND LIMITATIONS

3.1 PRECAUTIONS

- Radiological hazards exist during operations in a Radiological area. Personnel are to read and sign the RWP and obey postings.
- Electrical hazards exist when connecting/disconnecting or switching on/off 480V DISC SW 41P-SW04/39. Personnel are to wear long sleeve 100% cotton shirts, safety shoes, and safety glasses.
- Eye, foot, head, and hand hazards exist during spotting operations or handling 480 V-cable. Personnel are to wear leather (mechanics) gloves and safety/hard toed shoes, safety glasses with side shields, and hard hat.
- Forklift use hazards exist during general operations. Personnel are to use a designated spotter and travel on suitable surfaces.
- Hazardous energy hazards exist while car is in motion. Personnel are to stay clear of cable reel, car, and structures, and wear leather (mechanics) gloves. When connecting or disconnecting the 480 volt power cable, personnel are to make sure the local disconnect is off.

- Pinch point hazards exist during general operations and inspections. Personnel are to wear leather (mechanics) gloves and maintain situational awareness of placement of extremities.
- Slips/trips hazards exist during general operations and inspections. Personnel are to maintain situational awareness and good housekeeping.
- Vehicle traffic hazards exist during general operations. Personnel are to use a designated spotter.

3.2 LIMITATIONS

- The following Technical Safety Requirement applies:

  Liquid-fueled vehicles/equipment shall not be present in the CH Bay, Room 108, and Waste Shaft Access Area, when CH Waste is present in a process area, during Waste Handling and Waste Storage Modes. **[LCO 3.3.2]**

## 4.0 PREREQUISITE ACTIONS

4.1 **REVIEW** Equipment Logbook for outstanding deficiencies and ARs.

4.2 Using the 13-ton forklift and a spotter, **POSITION** conveyance loading car into Conveyance Loading Room.

## 5.0 PERFORMANCE

### 5.1 PREOPERATIONAL CHECKS

HWFP

5.1.1 **($) GO TO** Attachment 1, Conveyance Loading Car Preoperational Checks, and **PERFORM** Steps 1 through 8. **[HWFP Table E-1]**

> **WARNING**
>
> When moving the 480V DISC SW 41P-SW04/39 breaker switch to the OFF or ON position, operators are required to wear 100% cotton long-sleeve shirts, safety shoes, and safety glasses.

5.1.2 **IF** power cable is connected to car,
**THEN GO TO** Step 5.1.3.

**OR**

**IF** power cable is not connected to car,
**THEN**

[ A ] **ENSURE** 480V DISC SW 41P-SW04/39 is OFF.

[ B ] **VERIFY** contacts are separated.

[ C ] **CONNECT** power cable and **STRAIN** relief to car.

5.1.3 **PLACE** 480V DISC SW 41P-SW04/39 in ON.

5.1.4 **TURN** system ON by turning system On-Off key switch clockwise on control panel 411-CP04/20.

5.1.5 **PUSH** start button.

HWFP

5.1.6 **($) GO TO** Attachment 1 and **PERFORM** Steps 9 through 11. **[HWFP Table E-1]**

5.1.7 **NOTIFY** WHE of operational status, deficiencies discovered and status of each.

[ A ] **IF** deficiencies cannot be corrected when discovered, **THEN INITIATE** AR.

5.1.8 **RECORD** the following information in the Equipment Logbook:

- Deficiencies found
- Procedure number
- Equipment number
- Check SAT or Problems Noted
- AR(s), if newly initiated or outstanding
- Date, time, and signature to document performance of preoperational check

5.1.9 **IF** preparing for Waste Handling Mode
**THEN GO TO** WP 05-WH1101, CH Surface Transuranic Mixed Waste Handling Area Inspections, and **COMPLETE** Conveyance Loading Car 41-H-018 portion of Attachment 4, TP-II Preoperational Waste Handling Mode Checklist.

5.1.10 **IF** a HWFP-required inspection becomes delinquent or failed, **THEN PERFORM** the following:

[ A ] Immediately **NOTIFY** on-call SEC Representative and CMRO of delinquent or failed inspection.

[ B ] **RESCHEDULE** and **COMPLETE** required inspection.

[ C ] **DOCUMENT** the following, and **SUBMIT** to PermitInspections@wipp.ws within five working days:

- Inspection document number
- Description of facility, equipment involved
- Schedule for inspection
- Reason(s) why inspection was **NOT** performed or failed
- Compensatory measures taken to offset negative impacts from **NOT** performing the inspection or equipment **NOT** providing its intended function
- Actions to prevent further delinquencies

[ D ] WHE, **GO TO** WP 15-GM1002, Issues Management Processing of WIPP Forms, and **ENSURE** a WIPP form is generated.

## 5.2 CONVEYANCE LOADING CAR SHUTDOWN

**WARNING**

When moving the 480V DISC SW 41P-SW04/39 breaker switch to the OFF or ON position, operators are required to wear 100% cotton long-sleeve shirts, safety shoes, and safety glasses.

5.2.1 **TURN** system OFF by turning system On-Off key switch counter-clockwise on control panel 411-CP04/20.

5.2.2 **PLACE** 480V DISC SW 41P-SW04/39 in OFF.

5.2.3 Visually **VERIFY** contacts are separated and breaker is OPEN.

5.2.4 **DISCONNECT** power cable.

**HWFP** **($)** Attachment 1 – Conveyance Loading Car Preoperational Checks **[HWFP Table E-1]**

**NOTE**

Deficiencies corrected when discovered are considered satisfactory.

| | INSPECTION | CRITERIA | SAT | UNSAT | NA |
|---|---|---|---|---|---|
| 1. | Tracks | **ENSURE** tracks are clear of obstacles | ☐ | ☐ | ☐ |
| 2. | Wheels | **ENSURE** wheels are fully seated on tracks | ☐ | ☐ | ☐ |
| 3. | General Condition Checks (visual) | **NO** loose parts | ☐ | ☐ | ☐ |
| | | **NO** grease leaks | ☐ | ☐ | ☐ |
| | | **NO** oil leaks, if leak is identified, refer to Attachment 2, Leak Categorization | ☐ | ☐ | ☐ |
| | | **NO** trash | ☐ | ☐ | ☐ |
| | | **NO** deterioration/damage which includes visible cracks, erosion, salt build-up, corrosion, malfunctions, and structural deterioration | ☐ | ☐ | ☐ |
| 4. | Gear Box Oil Level | **ENSURE** oil is above lower level mark | ☐ | ☐ | ☐ |
| 5. | Power Cable | **ENSURE** cable reel 41-P-004C is properly wound | ☐ | ☐ | ☐ |
| 6. | Guards | **ENSURE** guards are in proper place | ☐ | ☐ | ☐ |
| 7. | Reflectors | **ENSURE** reflectors are attached and not blocking Door #140 | ☐ | ☐ | ☐ |
| 8. | Light Transmitters | **ENSURE** both light transmitters are attached to car | ☐ | ☐ | ☐ |
| 9. | Operational Checks | **VERIFY** RED POWER light illuminates | ☐ | ☐ | ☐ |
| | | **MOVE** Up-Down joy stick to UP | ☐ | ☐ | ☐ |
| | | **VERIFY** RAISE light illuminates | ☐ | ☐ | ☐ |
| | | **VERIFY** limit switch stops UP travel | ☐ | ☐ | ☐ |
| | | **MOVE** Up-Down joy stick to DOWN | ☐ | ☐ | ☐ |
| | | **VERIFY** LOWER light illuminates | ☐ | ☐ | ☐ |
| | | **VERIFY** limit switch stops DOWN travel | ☐ | ☐ | ☐ |
| | | **ENSURE** sensor selector is in tram | ☐ | ☐ | ☐ |
| 10. | Sensor Bypass Checks | Momentarily **PRESS** Sensor Bypass push button while holding FWD/REV joy stick in FWD position | ☐ | ☐ | ☐ |
| | | **VERIFY** FWD light illuminates | ☐ | ☐ | ☐ |
| | | **VERIFY** forward travel a minimum of two feet | ☐ | ☐ | ☐ |
| | | **MOVE** FWD/REV joy stick to REV position | ☐ | ☐ | ☐ |
| | | **VERIFY** REV light illuminates | ☐ | ☐ | ☐ |
| | | **VERIFY** reverse travel | ☐ | ☐ | ☐ |
| | | **VERIFY** sensor stops conveyance car | ☐ | ☐ | ☐ |
| | | Momentarily **PRESS** Sensor Bypass push button while holding FWD/REV joy stick in REV position | ☐ | ☐ | ☐ |
| 11. | With Panel Energized | **PRESS** EMERGENCY STOP button | ☐ | ☐ | ☐ |
| | | **VERIFY** panel de-energizes | ☐ | ☐ | ☐ |
| | | **RESET** Emergency Stop button | ☐ | ☐ | ☐ |

**Attachment 2 – Leak Categorization**

| | TYPE 0 | TYPE 1 | TYPE 2 | TYPE 3 | TYPE 4 |
|---|---|---|---|---|---|
| Indications: | No indications of moisture–dry | Dampness around hoses or engine compartments, including oil sheen | Dripping from a hose | Spraying from a hose or oil running down firewall, etc. | Ruptured hose (e.g., oil line, fuel line) |
| Status | **Operational** | | **DO NOT OPERATE** | | |
| Required Actions: | None | **RECORD** leak Type 1 and the source of the leak in equipment specific Logbook | [A] **TAG** equipment OOS with an OOS Tag per WP 04-AD3016, Equipment Out of Service Process<br>[B] **SUBMIT** AR for repairs<br>[C] **RECORD** leak type and AR number in equipment specific Logbook<br>[D] **WHEN** repairs and cleanup are completed, the equipment can be put back into service | | |